

# **Material Safety Data Sheet**

Transportation Emergency: 1-800-451-8346

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SECTION 1. ----- CHEMICAL IDENTIFICATION-----

CATALOG #: 2329-3-44

NAME: ETHYL 2-(ETHOXYMETHYLENE)-4,4,4-TRIFLUORO-3-OXOBUTYRATE

SECTION 2. ---- COMPOSITION/INFORMATION ON INGREDIENTS -----

CAS #: 571-55-1

MF:  $C_9H_{11}F_3O_4 = 240.18$ 

SECTION 3. ----- HAZARDS IDENTIFICATION -----

LABEL PRECAUTIONARY STATEMENTS

TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.

SECTION 4. ----- FIRST-AID MEASURES-----

ORAL EXPOSURE

IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS. CALL A PHYSICIAN.

INHALATION EXPOSURE

IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.

DERMAL EXPOSURE

IN CASE OF CONTACT, IMMEDIATELY WASH SKIN WITH SOAP AND COPIOUS AMOUNTS OF WATER.

EYE EXPOSURE

IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES.

#### SECTION 5. ----- FIRE FIGHTING MEASURES -----

FLASH POINT

220 °F / 104 °C METHOD: CLOSED CUP

EXTINGUISHING MEDIA

SUITABLE: WATER SPRAY. CARBON DIOXIDE, DRY CHEMICAL POWDER, OR APPROPRIATE FOAM.

**FIREFIGHTING** 

PROTECTIVE EQUIPMENT: WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO PREVENT CONTACT WITH SKIN AND EYES. SPECIFIC HAZARD(S): EMITS TOXIC FUMES UNDER FIRE CONDITIONS.

#### SECTION 6. ----- ACCIDENTAL RELEASE MEASURES-----

PROCEDURE(S) OF PERSONAL PRECAUTION(S)

WEAR RESPIRATOR, CHEMICAL SAFETY GOGGLES, RUBBER BOOTS, AND HEAVY RUBBER GLOVES.

METHODS FOR CLEANING UP

ABSORB ON SAND OR VERMICULITE AND PLACE IN CLOSED CONTAINERS FOR DISPOSAL. VENTILATE AREA AND WASH SPILL SITE AFTER CLEANUP IS COMPLETE.

#### SECTION 7. ----- HANDLING AND STORAGE-----

**HANDLING** 

USER EXPOSURE: AVOID INHALATION. AVOID CONTACT WITH EYES, SKIN, AND CLOTHING. AVOID PROLONGED OR REPEATED EXPOSURE.

**STORAGE** 

SUITABLE: KEEP TIGHTLY CLOSED.

STORE AT 2-8°C

#### SECTION 8. ---- EXPOSURE CONTROLS/PERSONAL PROTECTION-----

#### **ENGINEERING CONTROLS**

SAFETY SHOWER AND EYE BATH. MECHANICAL EXHAUST REQUIRED. PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY: USE RESPIRATORS AND COMPONENTS TESTED AND APPROVED UNDER APPROPRIATE GOVERNMENT STANDARDS SUCH AS NIOSH (US) OR CEN (EU). RESPIRATORY PROTECTION IS NOT REQUIRED. WHERE PROTECTION IS DESIRED, USE MULTI-PURPOSE COMBINATION (US) OR TYPE ABEK (EN 14387) RESPIRATOR CARTRIDGES.

HAND: COMPATIBLE CHEMICAL-RESISTANT GLOVES.

EYE: CHEMICAL SAFETY GOGGLES.

GENERAL HYGIENE MEASURES

WASH THOROUGHLY AFTER HANDLING. WASH CONTAMINATED CLOTHING BEFORE REUSE.

## SECTION 9. ----- PHYSICAL AND CHEMICAL PROPERTIES -----APPEARANCE AND ODOR COLORLESS TO PALE YELLOW LIQUID PHYSICAL PROPERTIES BOILING POINT: 80 - 82 °C @ 1 mmHg DENSITY: 1.239 g/cm<sup>3</sup> @ 25 °C FLASH POINT: 220 °F / 104 °C METHOD: CLOSED CUP REFRACTIVE INDEX: 1.4262 @ 25 °C SECTION 10. -----STABILITY AND REACTIVITY -----**STABILITY** MATERIALS TO AVOID: STRONG OXIDIZING AGENTS. HAZARDOUS DECOMPOSITION PRODUCTS HAZARDOUS DECOMPOSITION PRODUCTS: CARBON MONOXIDE, CARBON DIOXIDE, HYDROGEN FLUORIDE. HAZARDOUS POLYMERIZATION HAZARDOUS POLYMERIZATION: WILL NOT OCCUR SECTION 11. - - - - TOXICOLOGICAL INFORMATION - - - - -ROUTE OF EXPOSURE SKIN CONTACT: MAY CAUSE SKIN IRRITATION. EYE CONTACT: MAY CAUSE EYE IRRITATION. MULTIPLE ROUTES: MAY BE HARMFUL BY INHALATION, INGESTION, OR SKIN ABSORPTION. SIGNS AND SYMPTOMS OF EXPOSURE TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED. SECTION 12. ----- ECOLOGICAL INFORMATION -----DATA NOT YET AVAILABLE. SECTION 13. ----- DISPOSAL CONSIDERATIONS -----APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION DISSOLVE OR MIX THE MATERIAL WITH A COMBUSTIBLE SOLVENT AND BURN IN A CHEMICAL INCINERATOR EQUIPPED WITH AN AFTERBURNER AND SCRUBBER. OBSERVE ALL FEDERAL, STATE, AND LOCAL ENVIRONMENTAL REGULATIONS. SECTION 14. ----- TRANSPORT INFORMATION -----DOT UNRESTRICTED SECTION 15. ----- REGULATORY INFORMATION -----UNITED STATES REGULATORY INFORMATION

TSCA LISTED: NO

### SECTION 16. ----- OTHER INFORMATION-----

THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT BUT DOES NOT PURPORT TO BE ALL INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE. SYNQUEST LABS, INC. SHALL NOT BE HELD LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING OR FROM CONTACT WITH THE ABOVE PRODUCT.